

WHAT IS CLAIMED IS:

1. A radial type hydraulic machine, comprising:
 - a pintle, which is supported at a casing of a radial type
 - 5 hydraulic machine to be incapable of rotating, and has a high pressure port and a low pressure port, and port passages communicating with said high pressure port and said low pressure port, respectively;
 - a cylinder block relatively rotatable with respect to said
 - 10 pintle; and
 - a cylinder bore section, which communicates with said high pressure port and said low pressure port by switching between them at the time of rotation of said cylinder block, and includes a plurality of cylinders,
 - 15 wherein said cylinder block is supported via bearings at both sides with said cylinder bore section between them to be rotatable with respect to said casing, and one end of said cylinder block is connected to a rotating shaft of said radial type hydraulic machine; and
 - 20 wherein cancel ports for balancing with a radial force from said high pressure port, which acts on said pintle, are formed at regions of said pintle, to which said high pressure port opposes, and pressure oil of said high pressure port is introduced into said cancel ports.

2. The radial type hydraulic machine according to Claim 1,
wherein said cancel ports are formed at both side
regions of said low pressure port along a circumferential
direction of said pintle each in a shape of a line of a narrow slit.
- 5 3. The radial type hydraulic machine according to Claim 2,
wherein the pressure oil of said high pressure port is
introduced into said cancel ports, and each of hydrostatic
bearing capacities on a port area by said cancel ports and a port
10 area by said high pressure port is made equal.
4. The radial type hydraulic machine according to Claim 3,
wherein ports for low pressure each in a shape of a line
of a narrow slit are formed at both side regions of said high
15 pressure port along the circumferential direction of said pintle,
which are the regions of said pintle to which said low pressure
port opposes, and pressure oil of said low pressure port is
introduced into said ports for low pressure.
- 20 5. The radial type hydraulic machine according to Claim 4,
wherein each of hydrostatic bearing capacities on a port
area by said ports for low pressure and a port area by said low
pressure port is made equal.
- 25 6. The radial type hydraulic machine according to Claim 3,

said radial type hydraulic machine being a radial type hydraulic machine having a plurality of rows of said cylinders in said cylinder bore section,

wherein said cancel ports are formed at regions to which
5 said high pressure port in each row opposes in said pintle.

7. The radial type hydraulic machine according to Claim 6,
wherein ports for low pressure each in a shape of a line
of a narrow slit are formed at both side regions of said high
10 pressure port along the circumferential direction of said pintle
in said each row, which are the regions of said pintle to which
said low pressure port in said each row opposes, each of
hydrostatic bearing capacities on a port area by said ports for
low pressure and a port area by said low pressure port
15 corresponding to said ports for low pressure is made equal, and
pressure oil of said low pressure port is introduced into each of
said ports for low pressure.

8. The radial type hydraulic machine according to Claim 6,
20 wherein said high pressure port in each row is evenly
placed at a position in the circumferential direction of said
pintle.